U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

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CHROMIUM IN JUNE 1996

Chromite consumption decreased by 26% in June 1996 compared with that of the previous month's revised data, according to the U.S. Geological Survey. Net production of chromium ferroalloys and metal in June decreased 28% compared with revised data for May. Chromite stocks slightly increased over the same period. At the June rate of consumption, chromium stocks represented 8 months of domestic supply.

Included in this Mineral Industry Surveys are: U.S. consumption and stocks of chromite; U.S. net production, net shipments, and stocks of chromium materials; U.S. Government inventory; and foreign trade for May.

TABLE 1 U.S. SALIENT CHROMIUM STATISTICS 1/

(Metric tons, gross weight unless otherwise noted)

	1995	1996			
	Year total	Apr.	May	June	Jan June
Production:					
Chromium ferroalloys and metal: 2/					
Net production:					
Gross weight	72,500	5,480	4,770 r/	3,450	32,200
Chromium content	49,500	3,810	3,360 r/	2,450	22,600
Net shipments	72,100	5,330	4,310 r/	2,110	32,600
Stainless steel production 3/	2,030,000	NA	NA	NA	NA
Components of U.S. supply:					
Stainless steel scrap receipts	663,000	48,600	46,400	48,300	305,000
Imports for consumption:					
Chromite ore	253,000	28,600	50,100	NA	91,400 4
Chromium ferroalloys 5/	495,000	62,700	62,900	NA	235,000 4
Chromium metal 6/	7,040	894	780	NA	4,200 4
Stainless steel	NA	NA	NA	NA	NA
Stainless steel scrap	43	4	5	NA	22 4
Distribution of U.S. supply:					
Consumption:					
Chromite ore	356,000 7/	29,600	30,400 r/	22,400	178,000
Chromium ferroalloys & metal	283,000	29,300	21,100	NA	126,000 4
Exports:					
Chromite ore	17,800	17,100	1,730	NA	24,100 4
Chromium ferroalloys	9,360	734	472	NA	3,650 4
Chromium metal	714	165	76	NA	495 4
Stainless steel	NA	NA	NA	NA	NA
Stainless steel scrap	368	37	20	NA	112 4
Stocks at end of period:					
Industry:					
Chromite ore:					
Chemical and metallurgical	194,000	143,000	159,000 r/	160,000	XX
Refractory	10,900	9,050	8,770 r/	8,870	XX
Total	205,000	152,000	167,000 r/	169,000	XX
Chromium ferroalloys and metal:					
Producer	8,430	6,190	6,650 r/	8,000	XX
Consumer	10,700	15,200	11,800	NA	XX
Government Stockpile:	- 7	-,	,		
Chromite ore	1,320,000	1,270,000	1,240,000	1,200,000	XX
Chromium ferroalloys	1,070,000	1,070,000	1,070,000	1,070,000	XX
Chromium metal	7,690	7,690	7,690	7,690	XX

r/ Revised. NA Not available. XX Not applicable.

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} Includes low- and high-carbon ferrochromium, chromium concentrate, ferrochromium-silicon, chromium metal, and other miscellaneous alloys.

^{3/} Data on stainless steel production from American Iron and Steel Institute, quarterly production of stainless and heat resisting raw steel.

^{4/} Includes data for January through May; June not available at time of publication.

^{5/} Includes high-, medium-, and low-carbon ferrochromium and ferrochromium-silicon.

^{6/} Includes waste and scrap and other.

^{7/} Includes withheld data for February through December.

 ${\bf TABLE~2}$ U.S. GOVERNMENT STOCKPILE INVENTORY 1/ OF CHROMIUM MATERIALS 2/

(Metric tons)

		Chromite ore		Chror	nium ferroalloys		Chromium r	netal
				High-	Low-			
				carbon	carbon	Ferro-		
		Metal-	Re-	ferro-	ferro-	chromium	Alumino-	Electro-
Period	Chemical	lurgical	fractory	chromium	chromium	silicon	thermic	lytic
1995:								
June	220,000	850,000	338,000	738,000	283,000	52,900	2,670	5,020
July	220,000	835,000	333,000	738,000	283,000	52,900	2,670	5,020
August	220,000	823,000	333,000	738,000	283,000	52,900	2,670	5,020
September	220,000	817,000	333,000	738,000	283,000	52,900	2,670	5,020
October	220,000	792,000	333,000	738,000	283,000	52,900	2,670	5,020
November	220,000	792,000	333,000	738,000	283,000	52,900	2,670	5,020
December	220,000	773,000	328,000	738,000	283,000	52,900	2,670	5,020
1996:								
January	220,000	750,000	328,000	738,000	283,000	52,900	2,670	5,020
February	220,000	739,000	328,000	738,000	283,000	52,900	2,670	5,020
March	220,000	722,000	328,000	738,000	283,000	52,900	2,670	5,020
April	220,000	717,000	328,000	738,000	283,000	52,900	2,670	5,020
May	220,000	694,000	328,000	738,000	283,000	52,900	2,670	5,020
June	220,000	658,000	327,000	738,000	283,000	52,900	2,670	5,020

^{1/} Includes specification and non-specification grade materials and materials set aside for disposal but not yet shipped.

Source: National Defense Stockpile Center.

 ${\bf TABLE~3}$ U.S. EXPORTS OF CHROMITE ORE, CHROMIUM FERROALLOYS AND METAL 1/

	Chromite ore		Chro	Chromium ferroalloys 2/			Chromium metal 3/	
	Gross		Gross	Chromium		Gross		
	weight	Value	weight	content	Value	weight	Value	
Period	(metric tons)	(thousands)	(metric tons)	(metric tons)	(thousands)	(metric tons)	(thousands)	
1995:								
May	2,030	\$437	932	565	\$1,170	32	\$407	
June	2,020	321	1,100	648	1,530	49	599	
July	1,260	226	635	381	957	69	418	
August	1,100	213	685	403	1,070	26	329	
September	1,350	294	876	530	1,240	61	652	
October	1,140	228	923	560	1,270	42	616	
November	1,330	425	591	353	855	48	424	
December	1,420	205	528	289	639	157	1,520	
Total	17,800	3,430	9,360	5,540	12,500	714	7,820	
1996:								
January	1,740	427	885	519	1,120	86	1,000	
February	1,700	407	887	536	1,230	44	618	
March	1,840	484	669	399	894	124	1,450	
April	17,100	2,280	734	441	843	165	1,530	
May	1,730	1,160	472	288	597	76	863	
Total	24,100	4,750	3,650	2,190	4,690	495	5,460	

 $^{1/\,\}mbox{Data}$ are rounded to three significant digits; may not add to totals shown.

^{2/} Data are rounded to three significant digits.

 $^{2\!/}$ Includes low-, medium-, and high-carbon ferrochromium, and ferrochromium-silicon.

^{3/} Includes wrought and unwrought and waste and scrap.

$\label{table 4} TABLE~4$ U.S. IMPORTS FOR CONSUMPTION OF CHROMITE ORE, FERROCHROMIUM, AND CHROMIUM METAL 1/

(Metric tons)

	1995		1996	
	Jan Dec.	Apr.	May	Jan May
Chromite ore:				
Not more than 40% chromic oxide:	-			
Gross weight	11,600		15	2,470
Chromic oxide content	4,120		6	816
More than 40% but less than 46% chromic oxide:	=			
Gross weight	14,800		15,000	15,000
Chromic oxide content	6,110		6,570	6,570
46% or more chromic oxide:	_			
Gross weight	226,000	28,600	35,100	73,900
Chromic oxide content	109,000	13,400	16,300	34,500
Total, all grades:				
Gross weight	253,000	28,600	50,100	91,400
Chromic oxide content	119,000	13,400	22,900	41,900
Ferrochromium:				
Low-carbon: 2/	_			
Gross weight	65,800	9,040	5,740	30,000
Chromium content	42,800	5,360	3,850	18,500
Medium-carbon: 3/	_			
Gross weight	7,570			36
Chromium content	4,930			23
High-carbon: 4/	-			
Gross weight	422,000	53,700	57,200	205,000
Chromium content	254,000	30,500	33,000	118,000
Total, all grades:				
Gross weight	495,000	62,700	62,900	235,000
Chromium content	301,000	35,900	36,900	137,000
Chromium metal:				
Other than waste and scrap	6,930	894	763	4,160
Waste and scrap	109		17	34
Total, all grades	7,040	894	780	4,200

r/ Revised.

- 1/ Data are rounded to three significant digits; may not add to totals shown.
- 2/ Ferrochromium containing not more than 3% carbon.
- 3/ Ferrochromium containing more than 3% but not more than 4% carbon.
- 4/ Ferrochromium containing more than 4% carbon.

Source: Bureau of the Census.

TABLE 5 U.S. IMPORTS FOR CONSUMPTION OF CHROMITE ORE IN MAY 1996, BY GRADE AND BY COUNTRY 1/

		May		J	January - May			
	Gross		_	Gross		-		
	weight	Cr2O3	Value 2/	weight	Cr2O3	Value 2/		
Country	(metric tons)	(metric tons)	(thousands)	(metric tons)	(metric tons)	(thousands)		
Not more than 40% chromic								
oxide:								
Philippines				2,440	804	\$362		
Venezuela	15	6	5	31	12	11		
Total	15	6	5	2,470	816	372		
More than 40% but less than	· ·							
46% chromic oxide:								
South Africa	15,000	6,570	1,510	15,000	6,570	1,510		
46% or more chromic oxide:						-		
South Africa	35,100	16,300	3,100	73,900	34,500	6,470		
Total, all grades:								
Philippines				2,440	804	362		
South Africa	50,100	22,900	4,610	88,900	41,100	7,980		
Venezuela	15	6	5	31	12	11		
Total	50,100	22,900	4,620	91,400	41,900	8,350		

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} Customs import value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance and other charges incurred in bringing the merchandise to the United States.

TABLE 6 U.S. IMPORTS FOR CONSUMPTION OF FERROCHROMIUM IN MAY 1996, BY GRADE AND BY COUNTRY 1/

	May			January - May		
	Gross	Chromium		Gross	Chromium	
	weight	content	Value 2/	weight	content	Value 2/
Country	(metric tons)	(metric tons)	(thousands)	(metric tons)	(metric tons)	(thousands)
High - carbon ferrochromium: 3/						
Albania				5,000	3,010	\$4,110
China				7,760	4,980	5,570
Croatia	2,210	1,380	\$914	9,430	5,880	6,110
Estonia				8,310	5,400	5,360
Finland				9,020	4,790	4,820
India	2,680	1,660	1,540	4,610	2,870	3,120
Japan				18	12	25
Kazakstan	31,700	19,000	18,900	50,000	28,900	30,200
Russia				17,500	9,370	13,200
South Africa	16,300	8,360	7,730	43,500	22,100	21,700
Turkey	2,220	1,380	1,390	29,000	18,000	20,500
United Kingdom	426	264	263	480	301	365
Zimbabwe	1,600	1,010	886	19,900	12,600	15,200
Total	57,200	33,000	31,600	205,000	118,000	130,000
Medium - carbon ferrochromium: 4/						
Philippines				36	23	47
Low - carbon ferrochromium: 5/	_					
China	200	134	365	4,300	2,850	6,890
Croatia				20	13	17
Germany	1,440	1,020	3,390	3,310	2,320	7,440
Japan	46	31	86	111	76	244
Kazakstan				92	63	131
Russia	3,450	2,280	5,410	7,050	4,680	10,500
South Africa	400	246	630	12,900	7,160	11,300
Turkey	201	148	416	201	148	416
United Kingdom				36	23	45
Zimbabwe				1,960	1,160	1,750
Total	5,740_	3,850	10,300	30,000	18,500	38,700
Total, all grades:						
Albania				5,000	3,010	4,110
China		134	365	12,100	7,840	12,500
Croatia	2,210	1,380	914	9,450	5,900	6,130
Estonia				8,310	5,400	5,360
Finland				9,020	4,790	4,820
Germany	1,440	1,020	3,390	3,310	2,320	7,440
India	2,680	1,660	1,540	4,610	2,870	3,120
Japan	46	31	86	129	88	269
Kazakstan	31,700	19,000	18,900	50,100	28,900	30,300
Philippines				36	23	47
Russia	3,450	2,280	5,410	24,600	14,000	23,700
South Africa	16,700	8,610	8,360	56,400	29,300	33,000
Turkey	2,420	1,530	1,810	29,200	18,100	20,900
United Kingdom	426	264	263	516	324	411
Zimbabwe	1,600	1,010	886	21,900	13,800	16,900
Total	62,900	36,900	41,900	235,000	137,000	169,000

 $^{1/\,}Data$ are rounded to three significant digits; may not add to totals shown.

^{2/} Customs import value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance and other charges incurred in bringing the merchandise to the United States.

^{3/} Ferrochromium containing more than 4% carbon.

^{4/} Ferrochromium containing more than 3% but not more than 4% carbon.

^{5/} Ferrochromium containing not more than 3% carbon.

${\it TABLE~7} \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~CHROMIUM~METAL~IN} \\ {\it MAY~1996,~BY~GRADE~AND~BY~COUNTRY~1/} \\ {\it IN~COUNTRY~1/2000} \\ {\it Country~1/2000} \\ {\it Country~1/200$

	May		January - May		
	Gross weight	Value 2/	Gross weight	Value 2/	
Country	(metric tons)	(thousands)	(metric tons)	(thousands)	
Waste and scrap:	, ,	,	,	,	
Canada	1	\$7	1	\$7	
China			17	103	
Sweden	16	69	16	69	
Total	17	77	34	180	
Other than waste and scrap:					
China	35	207	631	3,720	
France	130	1,060	661	5,100	
Germany	29	269	64	722	
Hong Kong			34	210	
India			(3/)	11	
Italy			(4/)	(4/)	
Japan	11	280	165	2,540	
Netherlands			(3/)	2	
Portugal	(3/)	28	2	106	
Russia	417	2,510	2,040	11,800	
Spain	(3/)	14	1	31	
Switzerland	(3/)	9	4	11	
Taiwan	1	14	4	63	
United Kingdom	141	1,100	553	4,510	
Total	763	5,490	4,160	28,800	
Total, all grades:		,	,	,	
Canada	1	7	1	7	
China	35	207	648	3,820	
France	130	1,060	661	5,100	
Germany	29	269	64	722	
Hong Kong			34	210	
India			(3/)	11	
Italy			(4/)	(4/)	
Japan	11	280	165	2,540	
Netherlands			(3/)	. 2	
Portugal	(3/)	28	2	106	
Russia	417	2,510	2,040	11,800	
Spain	(3/)	14	4	31	
Sweden	16	69	16	69	
Switzerland	(3/)	9	4	11	
Taiwan	1	14	4	63	
United Kingdom	141	1,100	553	4,510	
Total	780	5,570	4,200	29,000	

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} Customs import value generally represents a value in the foreign country and therefore excludes U.S. import duities, freight, insurance and other charges incurred in bringing the merchandise into the United States.

 $^{3/\} Less$ than $1/2\ unit.$

^{4/} Revised to zero.